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# FOCUS ON FELLOWS: JULIA KNISEL 2002–2004

In some circles, Absecon, New Jersey, is known as the city across the bay from Atlantic City. Growing up in Absecon with a twin brother and an older sister, Coastal Management Fellow Julia Knisel says, "My parents encouraged all three of us to ask questions and investigate our environment, but I'm the only one who has followed a scientific career path."

Growing up in the shadow of Atlantic City, Julia says, gave her a ring-side seat to many of the issues coastal resource managers must balance. She notes that her family's house is down the street from the turn-of-thecentury home that once belonged to Dr. Jonathan Pitney, considered the father of Atlantic City and one of Absecon's most famous residents.

It was in 1850 that Dr. Pitney first proposed developing a resort that would take advantage of Absecon Island's cool breezes and beaches. Once built, thousands fled the hot cities to enjoy summer pleasures at the seashore resort, which is now home to Atlantic City.

The once popular vacation destination began a serious



A new inlet that breached Hatteras Island in North Carolina during Hurricane Isabel.

decline in the 1960s. In 1976, New Jersey voters chose gambling as a way to rebuild the city and its tourist trade. No one predicted the rapid growth of the gaming industry in Atlantic City, or the tremendous amount of money and development it would bring to the city, region, and state.

While noting the positive impacts of revitalized neighborhoods, new housing projects and public service facilities, and economic, social, and cultural programs, Julia witnessed this rapid development and says the experience made her keenly aware of the pressures development places on the natural resources of a community.

Julia says that she was always interested in biology and chemistry in high school and it was her biology teacher that influenced her decision to study biology in college.

Before graduating from Pennsylvania State University with a bachelor's of science in biology, she applied to coastal zone management graduate programs. While waiting to hear back, she worked for nine months as a community coordinator for the nonprofit organization New Jersey Community Water Watch in Atlantic City. Water Watch works to address water quality problems in the urban areas of New Jersey through education and service.

Julia says her project site of Atlantic City was perfect for



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her because she "already knew the local environmental problems and had contacts within the community." During Julia's tenure, she focused on education and took learning experiences outside of the classroom by arranging field trips for children.

Julia moved from the developed sandy beaches of Southern New Jersey to the rocky coast of Maine to study coastal zone management in the School of Marine Sciences' Marine Policy Program at the University of Maine.

When her advisor. Joe Kelley, received funding from the Maine Coastal Program to study the outcomes of regulations for development in beach systems, Julia decided to base her master's of science thesis on the project.

Through extensive research and "a lot of detective work," Julia says she was able to associate the state's sand dune permits and flood claims with erosion and flood-hazard environments at the parcel level in geographic information systems (GIS) software.

While finishing her thesis, Julia learned about the Coastal Management Fellowship during one of her on-line job searches. The North Carolina fellowship project researching coastal hazards particularly appealed to her. Being a person who likes to look at the "big picture," she wanted to experience the coast of North Carolina and its management, which is often contrasted with New Jersey and compared to Maine.

Through a partnership between her three mentors, Steve Benton with the North



Fellow Julia Knisel seakayaking in Maine several summers ago.

Carolina Division of Coastal Management (DCM), and Margery Overton and John Fisher in the Department of Civil Engineering at North Carolina State University, Julia is updating DCM's Areas of Environmental Concern (AEC) that were delineated in 1978 to manage development in coastal inlet areas.

Julia spent most of the first year of her fellowship compiling a digital library of aerial photographs that cover the inlets from the 1940s to the present. Using the university's photogrammetric and GIS software, she also has begun the process of rectifying these aerial photos and digitizing shorelines.

Julia and her mentors are currently developing a methodology to quantitatively analyze the migration of Hatteras Inlet using the GIS shorelines to update its AEC. She says in a "couple of months" she will present the analysis to DCM's Science Panel on Coastal Hazards, which provides DCM's Coastal

Resources Commission with scientific data and recommendations. Once a methodology has been finalized for the remaining inlets, Julia will draft an article that she and her mentors plan to submit to a peer-reviewed journal. Before the end of her fellowship, Julia hopes to participate in developing recommendations that will update and expand DCM's existing AEC policies regarding inlet-hazard areas.

Julia says the Coastal Management Fellowship has increased her understanding of the "influence of the academic community on coastal management decisions." After the fellowship, Julia says she most likely will move back to New England where she can resume one of her favorite pastimes, sea kayaking. She says that Maine is one of her favorite places to sea kayak because "the granite islands and irregular coastline are fascinating." ♦

For more information about North Carolina's AEC, e-mail Julia at Julia.Knisel@ncmail.net





# FOCUS ON THE FELLOWSHIP: CALL FOR STATE PROPOSALS

All states with federally approved coastal zone management programs, and states developing such programs for approval, may submit one project proposal to the National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Center to compete for selection as a fellowship host state. Multiple state agencies or organizations with partnered implementation of the state's coastal management program also are eligible.

States that currently host a first-year fellow are not eligible to apply for a second fellow. Each year, six project proposals are selected. Two states, New York and Maine, were

competitively selected in 2003 but deferred placement until 2004. Four other state proposals will be selected for the 2004 fellowship.

State projects are selected based on the following equally weighted criteria:

- **Project Value** How the project will add value to the state's program
- Project Design -Identify goals and deliverables
- Value to Fellow Describe how the state
   will contribute to the
   fellow's professional
   development and
   educational experience
- State commitment to the project - Identify needed resources, describe how the

resources will be provided, and describe how the mentor will support the fellow

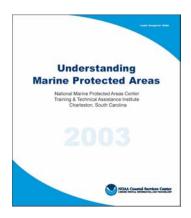
Send your proposal to:

Carmen Nash NOAA Coastal Services Center 2234 South Hobson Avenue Charleston, SC 29405

Proposals are due to the Coastal Services Center by close of business on **Friday**, **October 17**, **2003**. One signed original and four copies of the proposal must be received through the mail. Proposals transmitted via e-mail or fax will not be accepted. ◆

To view examples of state proposals that were selected last year, please visit the fellowship Web site at www.csc.noaa.gov/cms/fellows/stateproject.html.

# FOCUS ON THE CENTER: "UNDERSTANDING MARINE PROTECTED AREAS" COURSE



The territorial waters of the U.S. are as big as the land area. These waters contain a number of amazing and diverse habitats and ecosystems, from coral reefs to kelp forests. Congress recently created an executive order that protects many of these special areas.

Marine protected areas (MPAs) have existed in some form or another around the world and in this country for many years. The MPA Executive Order sparked a renewed interest in MPAs in this country. This interest often comes with numerous questions as stakeholders look to understand the MPA designation processes, policies, and impacts.

A new Center training program, "Understanding Marine Protected Areas," was designed for MPA stakeholders. This course is a little different from most Center programs because the primary audience can include the general public. The politically neutral workshop is designed to answer questions and provide fundamental information about MPAs, including the history, basic concepts and definitions, types, and uses of this management tool.

If your organization is interested in being a local host for this full- or half-day course, contact Heidi Recksiek at (843) 740-1194.

The workshop is offered by the National MPA Center's Training and Technical Institute, which is housed at the National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Center.

"Understanding Marine Protected Areas" is one of three new courses the Center recently added to its curriculum. To learn about the other two new courses, "Negotiating for Coastal Resources" and "GIS Training for Coastal Resource Professionals," please visit the Training Web site at www.csc.noaa.gov/training/.



#### NOAA Coastal Services Center LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

## Upcoming Training\*

\*Training classes are limited to project partners and NOAA line offices.

#### October 2003

- 1-2: Project Design and Evaluation
- 20-21: Introduction to ArcGIS 1
- 22-24: Coastal Applications Using ArcGIS 8.3
- 22-24: Public Issues and Conflict Management (PICM)

#### November 2003

- 3-4: Introduction to ArcGIS 1
- 5-7: Coastal Applications Using ArcGIS 8.3
- 18-20: Public Issues and Conflict Management (PICM)

#### December 2003

- 1-3: Public Issues and Conflict Management (PICM)
- 9-11: Project Design and Evaluation

All classes are held at the National Oceanic and Atmospheric Administration's Coastal Services Center in Charleston, South Carolina. For more information, point your browser to

www.csc.noaa.gov/training/.

#### **Upcoming Conferences & Events**

#### **OCTOBER**

#### 3-7: U.S. Coral Reef Task Force Meeting

Location: Commonwealth of the Northern Mariana Islands (Oct. 3-4) and Guam (Oct. 6-7) www.coralreef.gov/meet.cfm

#### 9-10: International Sustainable Marine Fish Culture Conference and Workshop

Location: Fort Pierce, Florida www.hboi.edu/aqua/conference.html

#### 17-18: CoastGIS '03

Location: Genova, Italy www.gisig.it/coastgis/

#### 16-19: Land Trust Alliance Rally 2003

Location: Sacramento, California www.lta.org/training/rally.htm

# 22-25: Assessment and Management of New and Developed Fisheries in Data-Limited Situations

Location: Anchorage, Alaska www.uaf.edu/seagrant/Conferences/dls-call.html

#### 27-29: Brownfields 2003

Location: Portland, Oregon www.brownfields2003.org

#### **NOVEMBER**

#### 2-5: Geological Society of America Annual Meeting

Location: Seattle, Washington www.geosociety.org/meetings/2003/

#### 3-5: Eighth International Conference on Estuarine and Coastal Modeling

Location: Monterey, California www.oce.uri.edu/ecm8/

#### 13-15: Managing Our Nation's Marine Fisheries - Past, Present, and Future

Location: Washington, D.C. www.gulfcouncil.org/upcoming.htm#Council 2003

#### **DECEMBER**

#### 4-5: Eighth Virgin Islands Nonpoint Source Pollution Conference

Location: St. John, U.S. Virgin Islands http://rps.uvi.edu/CES/VINPSconf2003.htm

### 11-13: Tools for Community Design and Decision Making Working Session V:

**Information Technology in Action** Location: San Francisco, California

Location: San Francisco, Californi www.tcddm.org/

For more information on upcoming events, please visit www.csc.noaa.gov/cms/conferences.html



